Proposed Approaches to Establishing TMDLs for PCBs for Zone 6 and Zones 2 - 5 of the Delaware Estuary

Water quality targets must be set for the TMDL for PCBs that is required to be established for Zone 6 (Delaware Bay) by December 2006, and for the Stage 2 TMDLs for Zones 2 - 5. On July 7, 2005, following an exhaustive technical development and review process, the TAC approved by a vote of 7 in favor, none opposed, and 3 abstaining, a motion recommending the use of a revised criterion of 16 pg/l for Zones 2 - 6. The municipal, industrial and agricultural members abstained. The regulated community has indicated that its members will object to any change in the value of a DRBC water quality criterion. The environmental community has not taken a firm position, but has suggested that the revised criterion may not be protective enough.

A decision on the water quality targets for either of the anticipated PCB TMDLs is expected to have no impact on implementation of the Stage 1 TMDLs for PCBs in Zones 2-5, for point sources, since the Stage 1 TMDLs are being implemented for the time being through non-numeric permit requirements (pollutant minimization plans or "PMPs").

The purpose of this paper is to present staff recommendations on the development of these TMDLs for PCBs.

STAFF RECOMMENDATION for ZONE 6:

Develop a Stage 1 TMDL for Zone 6 by December 15, 2006 Using the Current DRBC Criterion of 7.9 pg/l for Zone 5 and DE Water Quality Criterion of 64 pg/l for Zone 6.

Advantages:

- Existing Stage 1 TMDLs for Zones 2 5 are not undercut by adoption of more stringent water quality criterion or new fish consumption rates.
- Allows for further data collection and subsequent use of homolog models for Stage 2.
- Risk of legal challenge to adoption of a new water quality criterion is avoided in the short-term.
- No action required of the Commission by December 2006.
- Consistent with recent Federal Recommendation Paper (attached).

Disadvantages:

- The TMDL established for Zone 6 in 2006 will be substantially lower than a TMDL based on 64 pg/l, since it will be driven by the transition to a criterion of 7.9 pg/l in lower Zone 5.
- WLAs and LAs will also be substantially lower as a result.
- Fish consumption rate resulting in a criterion of 7.9 pg/l is no longer supported by site-specific data.
- Use of outdated fish consumption value makes the TMDL vulnerable to challenge.

STAFF RECOMMENDATION for STAGE 2, ZONES 2 - 6:

Develop Stage 2 TMDLs for Zones 2 - 6 by December 2008 Based Upon an Updated PCB Criterion of 16 pg/l.

Advantages:

- Updated criterion of 16 pg/l is applied uniformly to Zones 2 6 for the Stage 2 TMDLs, allowing for subsequent adjustment of TMDLs as long as a uniform criterion is applied.
- Revised criterion of 16 pg/l for Zones 2 6 is based upon the best scientific information and procedure available.
- Allowable loadings from tributaries in DE, NJ and PA will be based upon the tributary criteria, rather than by the much lower criterion of 7.9 pg/l in Zone 5.

Disadvantages:

- Risk that Commission's adoption of a revised criterion of 16 pg/l (which must occur by December 2008) will be challenged in court.
- A potentially contentious rulemaking process to adopt the new criterion must be initiated in 2006.

PROPOSED ACTION ON DECEMBER 7:

Resolution for the Minutes Directing the Executive Director to Secure from the Regional Administrators of EPA Regions 2 and 3 Their Written Concurrence as to the Water Quality Endpoints for the PCB TMDLs to be Developed for the Delaware Estuary.